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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT:
NTS EVENT "KASSERI", 28 OCTOBER 1975

K. J. Hill, et al

Teledyne Geotech

Prepared for:

Advanced Research Projects Agency

10 December 1975

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December 1975

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

SDCS Event Report No. 41

NTS Event "KASSERI", 28 October 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"p" Arrival	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	14:41:32.0	14:30:06	38.2N	115.6W	5.9	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

	14:30:01.7	37.3N	116.4W	6.2	5.9
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All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

Long-period signals were recorded at all SDCS stations and LASA. ALPA and NORSAR long-period array data were not included due to program recovery problems.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14	00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35	41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41	19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09	43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49	25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 28 OCT 75
14:30:00.0 37.000N 116.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CAIC	REST	REST	REST
LAC	14 32 53.5	-0.1	0.3	12.0	35.7
PK-ON	14 34 46.2	0.0	-0.5	21.1	42.9
CPO	14 35 24.6	-0.1	0.5	24.8	84.6
WH2YK	14 35 37.5	0.2	0.6	26.2	339.2
FM-WV	14 36 02.3	-0.0	0.1	29.0	76.2
HN-ME	14 37 09.3	0.4	-0.0	36.7	60.5
NAC	14 41 32.0	-0.4	-1.0	73.1	24.1

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
14:30:10.6	37.601N	116.166W	55. CAIC	0.2	3	7
14:30:01.7	37.328N	116.371W	0. REST	0.5	3	7

CALC		
1 . 1		
0	.	0
0	0. 3	2
.	.	.
0	0. 0	0
0	.	0
0	.	0

REST		
1 . 1		
0	.	0
0	0. 3	2
.	.	.
0	0. 0	0
0	.	0
0	.	0

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONFD..LEVEL, SDV= 1.69
KAJOF 61.7KM. MINOR 37.9KM. AZ= 30 AREA= 7337 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 28 OCT 75
14:30:00.0 37.000N 116.000W 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/Z	MAGNITUDE		DIF	DIST
		TIME					MB	MS		
IAC	M	EP	14 32 53.5	ACZ	1.1	1874.	7.07			12.0
IAC		LR	14 37 49.0	LPZ	12.0	7999.		6.10		12.0
RK-OM		EP	14 34 46.2	SPZ	1.3	8756.	6.75			21.1
RK-CN		LQ	14 43 48.0	LPT	13.0	1089.				
RK-CN		LR	14 44 37.0	LPZ	13.0	3261.		5.96		21.1
CFC		EP	14 35 24.6	SPZ	1.0	2025.	6.46			24.8
CFC		LQ	14 43 42.0	LPT	18.0	2689.				
CFC		LR	14 45 26.0	LPZ	13.0	6884.		6.35		24.8
WH2YK		EP	14 35 37.5	SPZ	1.1	657.	5.94			26.2
WH2YK		LQ	14 44 47.0	LPT	21.0	1540.				
WH2YK		LR	14 46 54.0	LPZ	17.0	2393.		5.92		26.2
FN-WV		EP	14 36 02.3	SPZ	0.9	143.	5.46			29.0
FN-WV		LQ	14 44 46.0	LPT	16.0	3503.				
FN-WV		LR	14 46 45.0	LPZ	16.0	2940.		6.05		29.0
HN-ME		EP	14 37 09.3	SPZ	1.0	1679.	6.46			36.7
HN-ME		LQ	14 49 57.0	LPT	19.0	2156.				
HN-ME		LR	14 52 56.0	LPZ	15.0	613.		5.47		36.7
NAC		EP	14 41 32.0	AP	0.9	218.	5.93			73.1

ORIGIN	LAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA	IPMAG	LPSDV	LPSTA
14:30:10.6	37.601N	116.166W	55. CALC	6.10	0.53	6	5.91*****		1
14:30:01.7	37.328N	116.371W	0. REST	6.16	0.48	6	5.92*****		1

IAC NOT USED IN CALC RUN SP AVG. MAG.
IAC NOT USED IN REST RUN SP AVG. MAG.

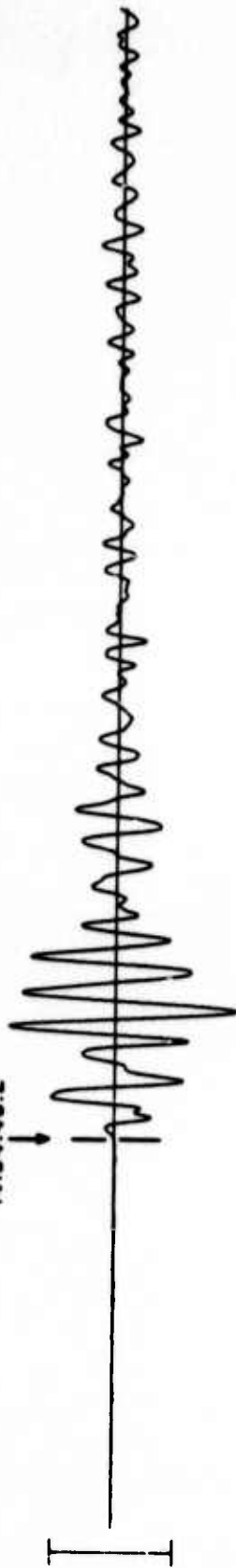
Short-period magnitudes (m_b) used in averaging are restricted to those recorded at distances between 20 and 110 degrees from the epicenter.

Average long-period magnitude (M_s) is based on Rayleigh wave observations in the period range of 17 to 23 seconds per cycle.

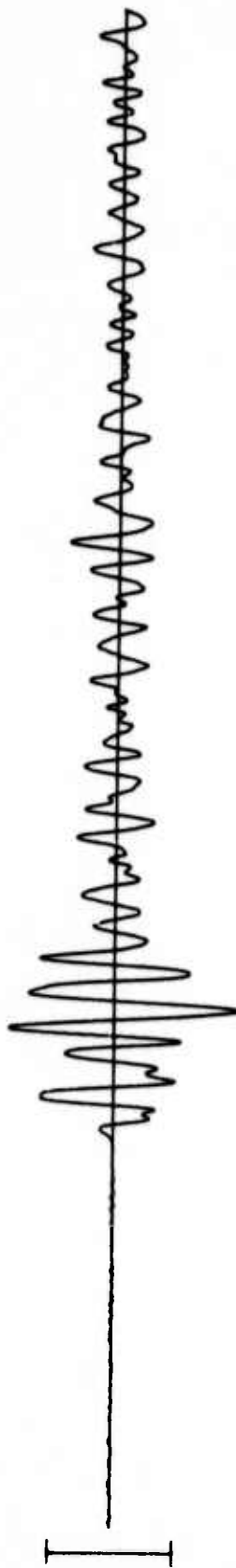
RK-ON 28 OCT 75

SPZ
2890.68 MHz

14:34:46.2



SPR
2266.84 MHz



SPT
517.88 MHz



TIME

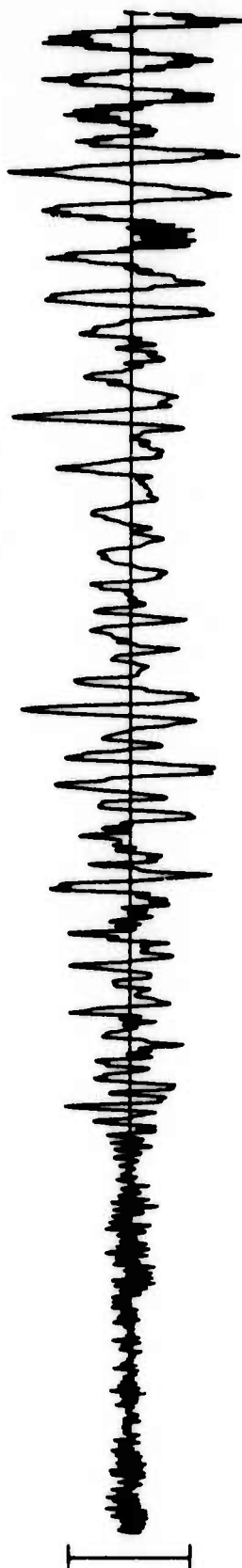
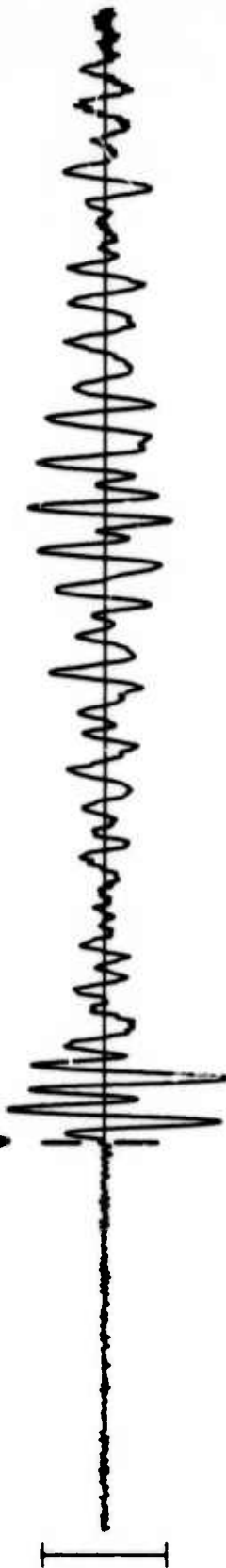
10 SEC

14:35:00

5<

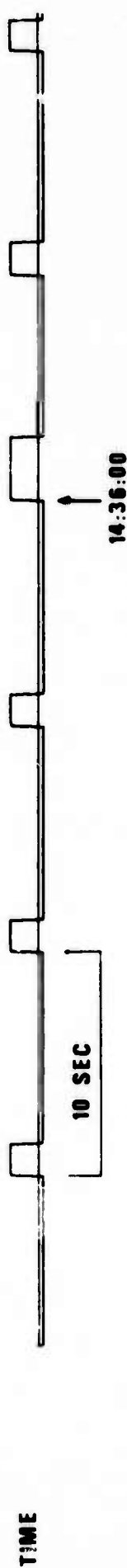
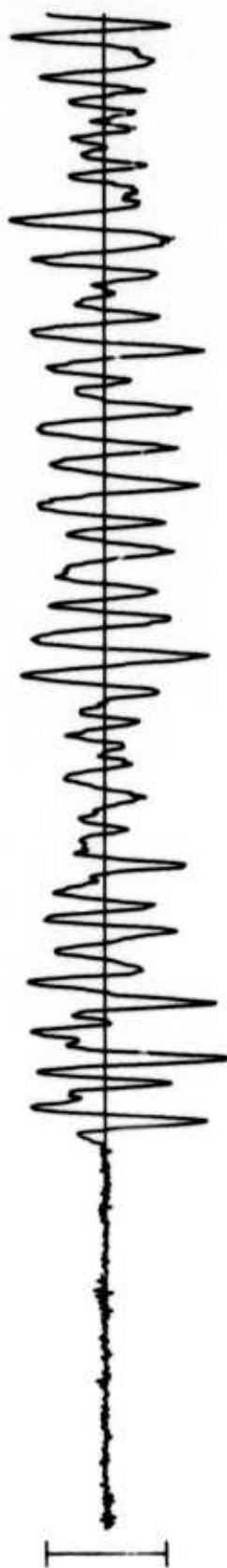
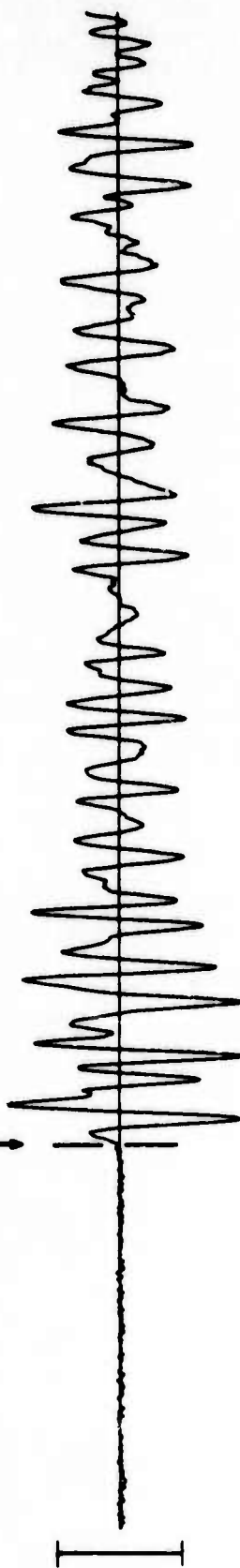
CPS0 28 OCT 75

14:35:24.8
↓



WH2YK 28 OCT 75

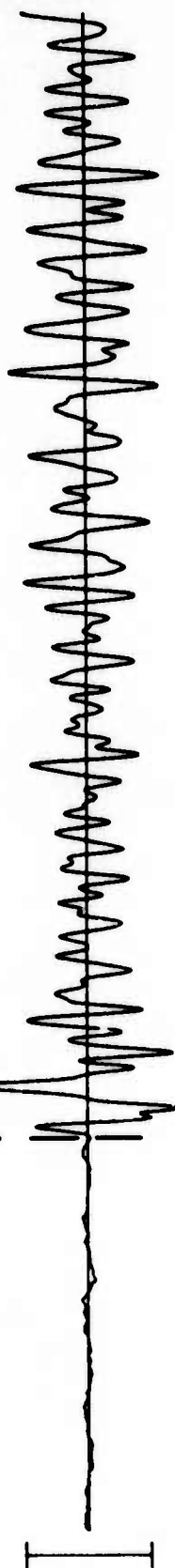
14:35:37.5



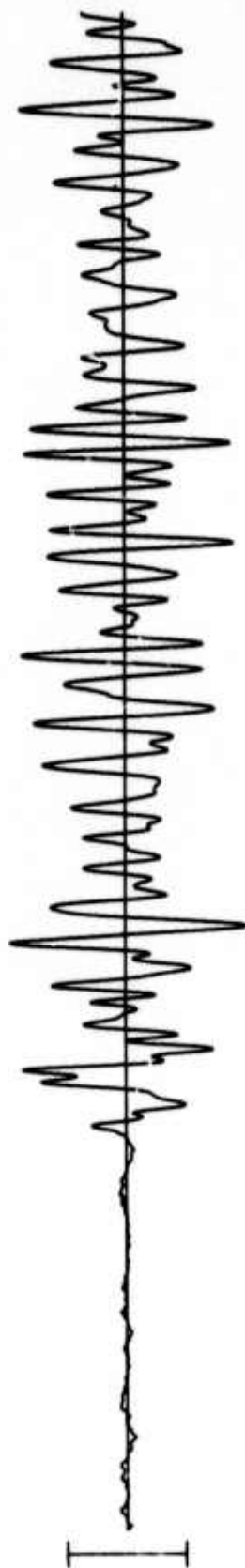
2<

FN-WV 28 OCT 75

14:36:22.3



SPZ
177.35 MHz



SPR
128.20 MHz



SPT
107.60 MHz

TIME



10 SEC



14:36:20

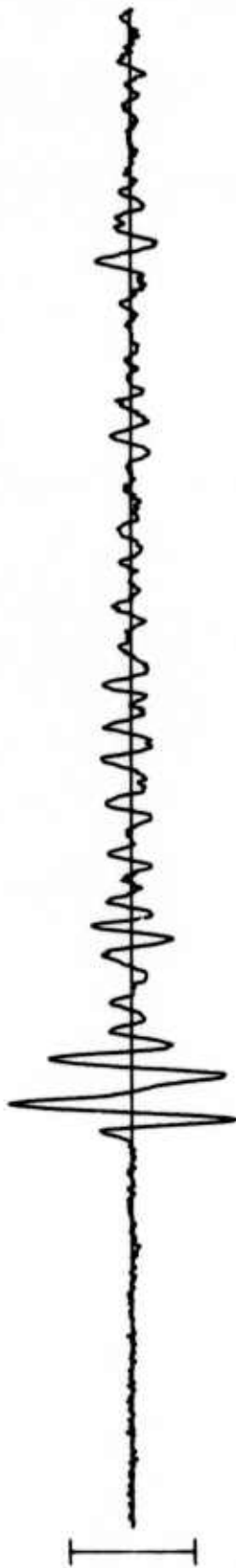
HN-ME 28 OCT 75

14:37:09.3

SPZ
853.24 MHz



SPR
538.93 MHz



SPT
360.81 MHz



TIME

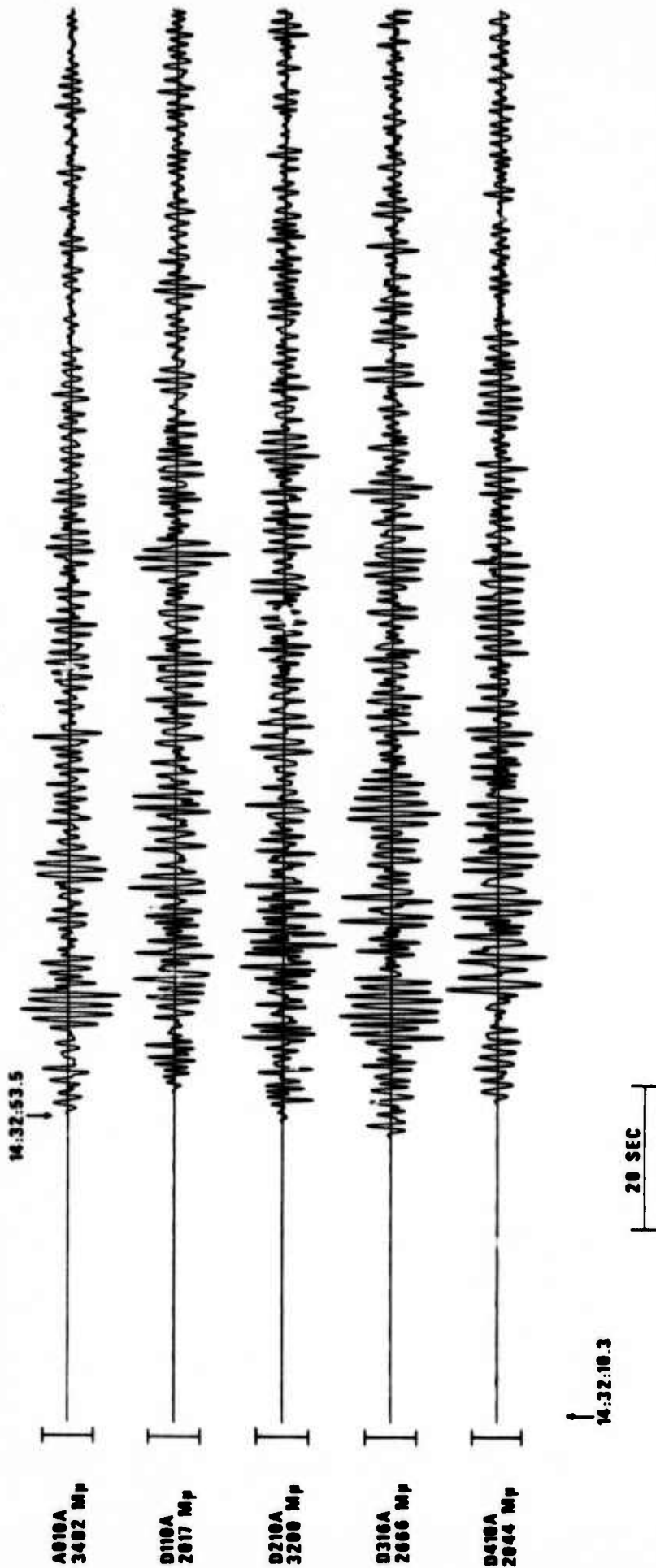


10 SEC

14:37:20

9<

LASA INDIVIDUAL LOW-GAIN SENSORS 28 OCT 75

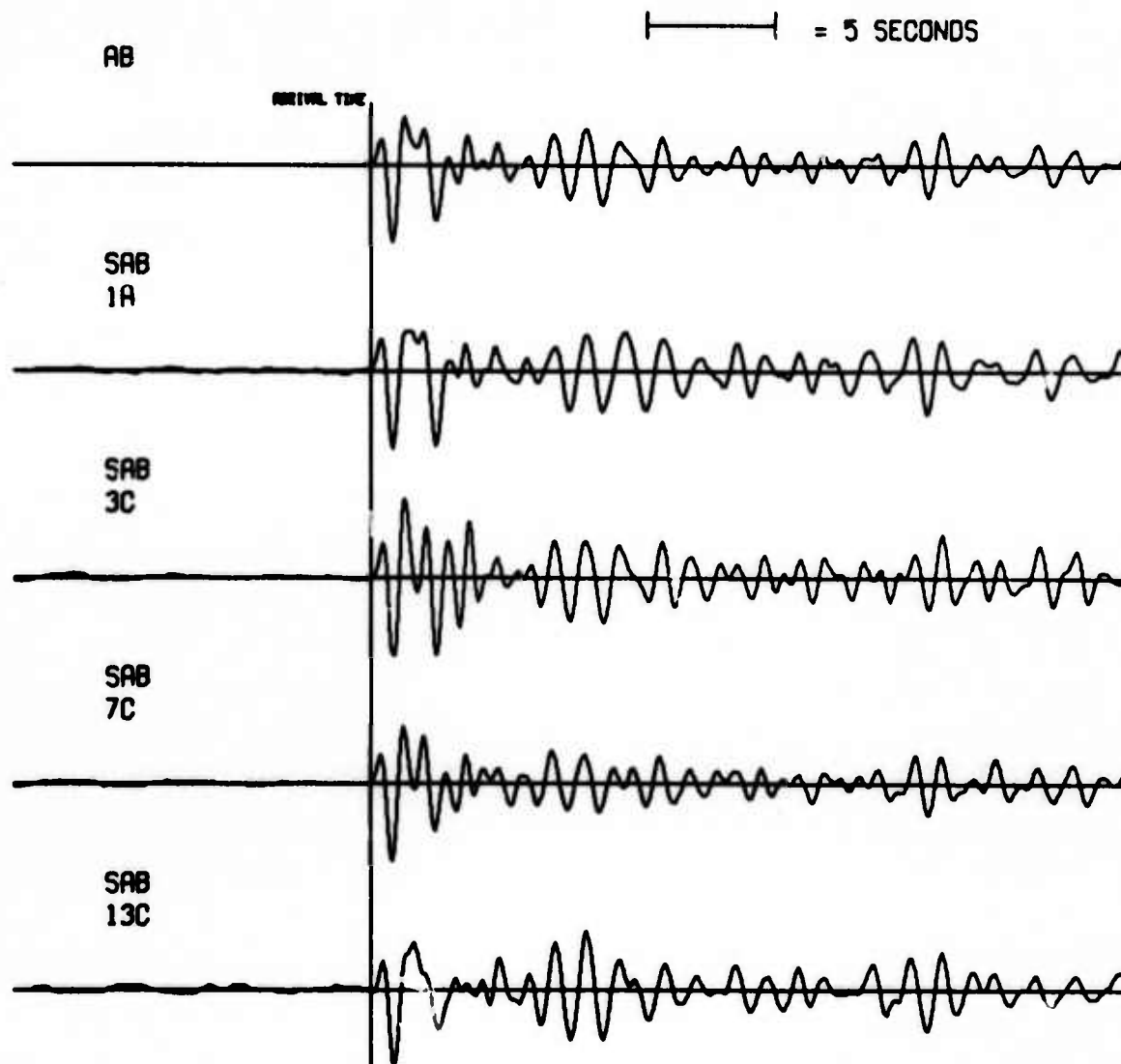


NORSAR EVENT FILE

28 OCT 75

EPX NO. 53570 ARR. 14.41.31.9 38.2N 115.6W 5.8MB 33KM

DIST = 72.1 AZI = 318.2 AMP = 91.6 PER = 0.9



RK-ON 28 OCT 75

14:44:37

LPZ
0236.88 MP

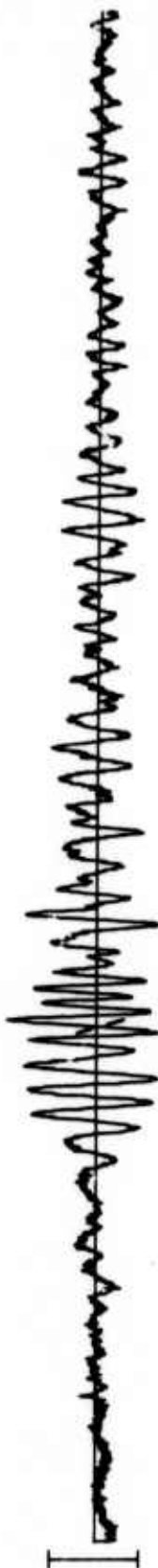


LPR
7010.16 MP

14:43:48



LPT
3590.32 MP



TIME

2 MIN

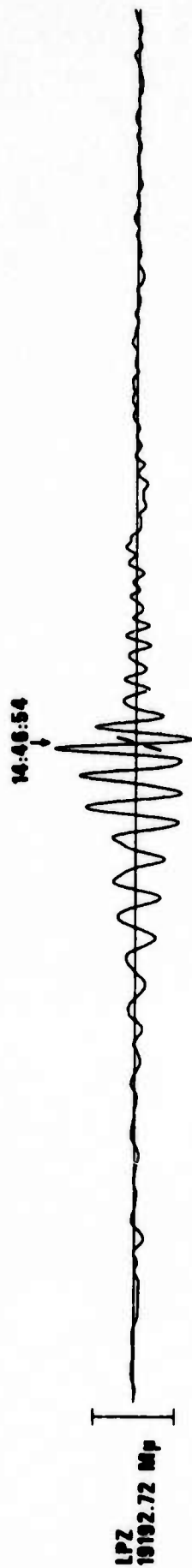
14:45:90



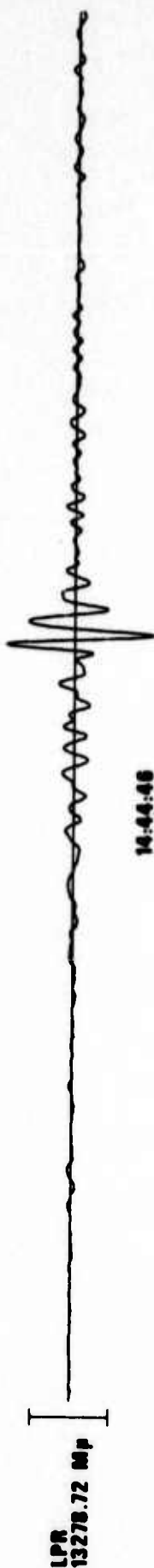
CPSO 28 OCT 75



WH2YK 28 OCT 75



FN-WV 28 OCT 75



HN-ME 28 OCT 75

14:52:56

LPZ
2960.10 MHz



LPR
2160.36 MHz



14:49:57

LPT
19900.16 MHz



TIME



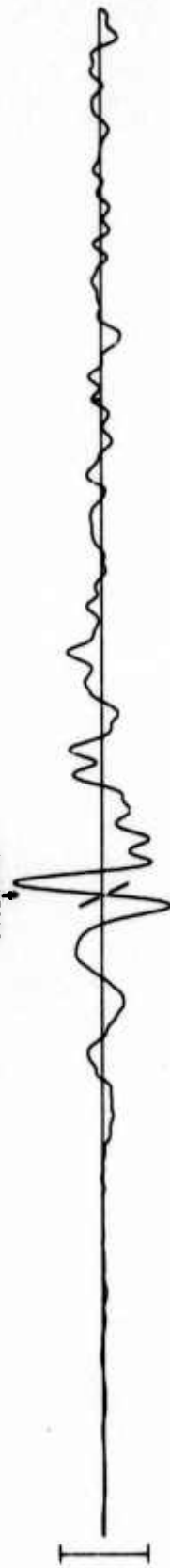
2 MIN

14:50:00

LASA LONG-PERIOD C4 SUBARRAY BEAMS 28 OCT 75

14:37:49

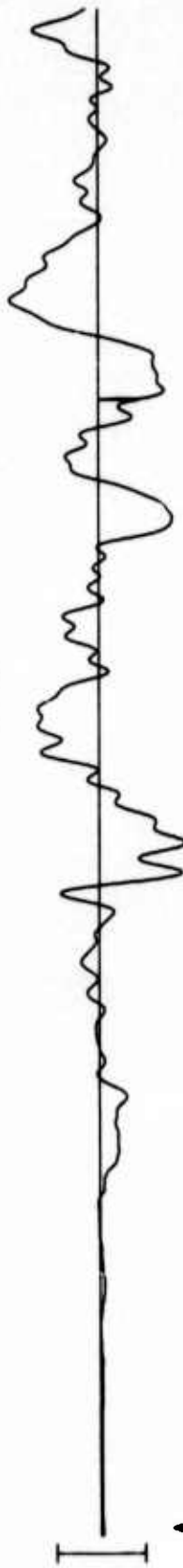
C4LZ
17726 MP



C4LN
40000 MP



C4LE
20502 MP



14:35:00.1

1 MIN